

*** NETANSWERS INTERNET EXTRA ***

For the week of February 16, 1998

Gotta be the first kid on the block with a new toy: this week, Kevin rants (but mostly raves) about life with a cable modem. Should you ditch that old modem for cable Internet access? Well, maybe. Read on.

=*=*= The Cable Guy =*=*=

Back in 1995, a phone company truck pulled up to my house, and the nice man appeared with his clipboard and his rolls of wires. By the time the nice man left, he had installed ISDN, a type of phone line that would let me access the Internet at up to 128 Kbps. (He had also managed to create a 6-inch long gouge in the wood floor of my home office. Not that I hold any grudges.)

In 1995, most Internet users were plodding along at 14.4 or 28.8 Kbps. I was one of a relatively small number with access at 128 Kbps. ISDN was expensive and difficult to set up. But boy howdy, it was fast.

Fast forward to 1998, when there are a whole bunch of new choices for speedy Internet access. (I talked about many of them in NetAnswers Internet Extra #10, "High Speed Access: Dream or Reality?") A few weeks ago, the phone company guy pulled the ISDN wires from the wall -- I upgraded to a cable modem.

With cable Internet access, the data that comes from the Internet to your computer is delivered by the same wire that brings 40 channels of news, entertainment and that weird South Park show to your boob tube. That cable delivers hundreds of megabytes of data to your home every minute. A cable modem siphons off a smidgen of that bandwidth for Internet access. Before you get too excited, I've got to warn you. You can't get cable Internet access yet from most locales in the United States. It requires that your cable company has special equipment and a positive attitude. (The cable company that my father is stuck with doesn't even provide stereo TV sound. So he isn't holding his breath for cable Net access.) All I can suggest is to call your cable company and ask 'em for it.

Assuming your cable company is good to go, you'll need a few items to get this show on the road: first, a cable modem, the device that connects via a wire to the cable TV jack in the wall. The cable modem connects to your computer via Ethernet, so it will need an Ethernet card. (Ethernet is necessary because cable access is faster than the serial ports in most computers.) You may also need to attach the cable modem to a standard phone line. Although data that you receive comes via the TV cable, on some systems the data from your computer is sent via a traditional analog modem. This is called "modem return" or "telco return." Other systems can use the TV cable for your outgoing data -- this is dubbed "cable return."

Technical details can wait: I'm guessing that you want to know just how fast this connection really is. I'll relate my experiences with my cable Internet service provider, but keep in mind that various companies do things very differently. As the saying goes, your mileage may vary.

Earlier this evening, I downloaded the latest version of Netscape Communicator, weighing in at just over 10.4 megabytes, in about seven minutes. That works out to about 200 thousand bits per second: roughly seven times the capacity of a 28.8

KBPS modem, or 3.5 times the bandwidth of a 56 KBPS modem. Netscape's servers may have been clogged, because I've seen better, up to twice that speed, about 400 KBPS.

Web pages also download quickly, although the speed increase doesn't seem as dramatic as with FTP. Since Web pages tend to be comprised of many small files rather than one great big one, there is more overhead. Therefore, your transmission speed and latency (which I talk about below) play more of a role in slowing things down. Streaming downloads work beautifully. It is safe to say that I've become spoiled, frequently listening to high-quality RealAudio feeds while surfing the Web and downloading files, with nary a hiccup in the sound.

400 KBPS is nothing to sneeze at: it is certainly enough for a single user or shared in a small office. My cable access is actually on the slow side: some providers advertise access at 1 million bits per second and higher.

Cable's not a magic bullet for unlimited speed. As with any Internet connection, your transfer time is limited by the capacity of the network and servers. If the network is clogged, your connection will suffer. Most cable Internet access systems are asymmetric -- that is, your capacity for sending data is less than for receiving it. Data flowing from your computer straggles out at a much slower pace -- perhaps as slow as 28.8 KBPS. So, while cable can be a great tool if you download a lot of information from the Internet -- accessing the web, reading newsgroups, downloading files -- it probably isn't your best choice if you want to send gobs of information. If you want to run a web server or frequently upload megabytes of files to an FTP server, cable won't have the transmission speed that you need.

Another factor that is completely up to the whims of your cable company is price. I have seen cable Internet access advertised for as low as \$20 per month. I'm paying \$57 month for access, which includes rental of a cable modem.

A quick tangent: most of us tend to discuss our Internet connection in terms of speed. This is a common mistake: when we're talking about KBPS, we're really talking capacity, not speed. A cable modem provides a lot of capacity, but not necessarily top speed. The NetBITS Internet newsletter ran a wonderful two-part article all about this. Read it to find out why "speed" isn't really speed. The article is on the web at:

<http://www.netbits.net/nb-issues/NetBITS-015.html#lnk2> (part 1)

<http://www.netbits.net/nb-issues/NetBITS-016.html#lnk2> (part 2)

Perhaps three years from now, I'll pull the cable wire from the wall and replace it with whatever cheaper, faster technology has been perfected by then. Until that day comes, cable access is a option to consider for a fast, cheap Net connection.

==*== FOR MORE INFORMATION ==*==

CableModems.com: <http://www.cablemodems.com/>

Cable Modem FAQ from Cox Cable: <http://www.cox.com/highspeed/modemfaq.html>

Cable Modem University: <http://www.catv.org/modem/>

Index of Cable Modem Resources on the Web: <http://rpcp.mit.edu/~gingold/cable/>

==*== THE END ==*==

The NetAnswers Internet Extra is free to all CompuServe members. It's available in the Internet Community Forum -- GO INETCOM and look in file library 11, "NetAnswers".

Got comments or ideas for future issues? We want to hear 'em. Just send a message to savetz@compuserve.com (74774,2725).

When you hold me in your arms so tight, you let me know everything's all right. I, I'm hooked on a feelin', high on believin' you're... Copyright 1998 by Kevin Savetz.